

## AMENDMENTS

### IN THE CLAIMS

5           **Claims 1-280. (canceled)**

281. (currently amended) A method for fabricating a circuit circuitry-component, comprising:

10           joining a preformed die and a preformed substrate, ~~wherein said die has a top surface at a horizontal level;~~ and

          after said joining said preformed die and said preformed substrate, depositing a circuit layer comprising a first portion over said preformed die and a second portion over said preformed substrate but not over said preformed die; and

15           depositing a gold bump over said circuit layer. ~~horizontal level.~~

282. (currently amended) A method for fabricating a circuit circuitry-component, comprising:

          joining a preformed die multiple dies and a preformed substrate;  
20           ~~after said joining said preformed die and said preformed substrate,~~ depositing-  
forming an insulating layer comprising a first portion over said preformed die multiple  
dies and a second portion over said preformed substrate but not over said preformed  
die, wherein said insulating layer comprises a porous structure; and

~~after said forming said insulating layer,~~ separating said preformed substrate  
into multiple portions.

25           283. (currently amended) A method for fabricating a circuit circuitry-component, comprising:

          joining a preformed die multiple dies and a preformed substrate; ~~wherein one of said multiple dies has a top surface at a horizontal level;~~ and

30           after said joining said preformed die multiple dies and said preformed substrate, depositing a circuit layer comprising a first portion over said preformed die  
and a second portion over said preformed substrate but not over said preformed die.

wherein said depositing said circuit layer comprises electroplating, and wherein said circuit layer comprises a part of a passive device; a passive device over said horizontal level; and

5 after said depositing said circuit layer, separating said preformed substrate into multiple portions.

284. (currently amended) A method for fabricating a circuit circuitry-component, comprising:

10 joining a preformed die multiple dies and a preformed substrate, wherein one of said multiple dies said preformed die has a top surface at a horizontal level;

after said joining said preformed die and said preformed substrate, depositing a waveguide over said horizontal level; and

15 after said depositing said waveguide, separating said preformed substrate into multiple portions.

285. (currently amended) A method for fabricating a circuit circuitry-component, comprising:

20 joining a preformed die and a preformed substrate, wherein said preformed die has a top surface at a horizontal level; providing a die having a top surface at a horizontal level; and

after said joining said preformed die and said preformed substrate, depositing a micro electronic mechanical element sensor (MEMS) over said horizontal level; and  
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25 after said depositing said micro electronic mechanical element, separating said preformed substrate into multiple portions.

286. (currently amended) A method for fabricating a circuit circuitry-component, comprising:

30 joining a preformed die and a preformed substrate, wherein said preformed die has a top surface at a horizontal level;

after said joining said preformed die and said preformed substrate, depositing a filter over said horizontal level; and

after said depositing said filter, separating said preformed substrate into multiple portions.

~~—depositing an insulating layer over a circuitry element;~~

~~—curing said insulating layer;~~

5 ~~—grinding said insulating layer; and~~

~~depositing a metal layer over said insulating layer.—~~

287. (new) The method of Claim 281 further comprising forming a polymer layer comprising a first portion over said preformed die and a second portion over said  
10 preformed substrate but not over said preformed die, followed by said depositing said circuit layer over said polymer layer.

288. (new) The method of Claim 287, wherein said forming said polymer layer comprises curing.  
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289. (new) The method of Claim 287, wherein said forming said polymer layer comprises grinding.

290. (new) The method of Claim 287, wherein said forming said polymer layer comprises etching.  
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291. (new) The method of Claim 281 further comprising forming a polymer layer over said circuit layer, followed by said depositing said gold bump.

25 292. (new) The method of Claim 281, wherein said depositing said circuit layer comprises electroplating.

293. (new) The method of Claim 281, wherein said depositing said circuit layer comprises electroless-plating.  
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294. (new) The method of Claim 281, wherein said depositing said circuit layer comprises sputtering.

295. (new) The method of Claim 281 further comprising forming a polymer layer over said preformed substrate and surrounding said preformed die, followed by said depositing said circuit layer having said first portion over said preformed die and  
5 said second portion over said polymer layer but not over said preformed die.

296. (new) The method of Claim 295, wherein said forming said polymer layer comprises curing.

10 297. (new) The method of Claim 295, wherein said forming said polymer layer comprises grinding.

298. (new) The method of Claim 295, wherein said forming said polymer layer comprises etching.  
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299. (new) The method of Claim 281, wherein said joining said preformed die and said preformed substrate comprises using a conductive paste.

300. (new) The method of Claim 281, after said depositing said gold bump,  
20 further comprising separating said preformed substrate into multiple portions.

301. (new) The method of Claim 282, after said forming said insulating layer, further comprising depositing a circuit layer over said insulating layer, followed by said separating said preformed substrate.  
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302. (new) The method of Claim 301, wherein said depositing said circuit layer comprises electroplating.

303. (new) The method of Claim 301, wherein said depositing said circuit  
30 layer comprises electroless-plating.

304. (new) The method of Claim 301, wherein said depositing said circuit layer comprises sputtering.

5 305. (new) The method of Claim 282, after said joining said preformed die and said preformed substrate, further comprising depositing a circuit layer having a first portion over said preformed die and a second portion over said preformed substrate but not over said preformed die, followed by said forming said insulating layer over said circuit layer.

10 306. (new) The method of Claim 305, wherein said depositing said circuit layer comprises electroplating.

15 307. (new) The method of Claim 305, wherein said depositing said circuit layer comprises electroless-plating.

308. (new) The method of Claim 305, wherein said depositing said circuit layer comprises sputtering.

20 309. (new) The method of Claim 282, after said joining said preformed die and said preformed substrate, further comprising forming a polymer layer over said preformed substrate and surrounding said preformed die, followed by said forming said insulating layer having a first portion over said preformed die and a second portion over said polymer layer but not over said preformed die.

25 310. (new) The method of Claim 309, wherein said forming said polymer layer comprises curing.

30 311. (new) The method of Claim 309, wherein said forming said polymer layer comprises grinding.

312. (new) The method of Claim 309, wherein said forming said polymer layer comprises etching.

313. (new) The method of Claim 282, wherein said joining said preformed die and said preformed substrate comprises using a conductive paste.

5           314. (new) The method of Claim 282, wherein said forming said insulating layer comprises curing.

315. (new) The method of Claim 282, wherein said forming said insulating layer comprises grinding.

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316. (new) The method of Claim 282, wherein said forming said insulating layer comprises etching.

15           317. (new) The method of Claim 282, wherein said forming said insulating layer comprises etching.

318. (new) The method of Claim 282, after said forming said insulating layer, further comprising depositing a solder bump over said preformed substrate but not over said preformed die, followed by said separating said preformed substrate.

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319. (new) The method of Claim 282, after said forming said insulating layer, further comprising depositing a gold bump over said preformed substrate but not over said preformed die, followed by said separating said preformed substrate.

25           320. (new) The method of Claim 283 further comprising forming a polymer layer comprising a first portion over said preformed die and a second portion over said preformed substrate but not over said preformed die, followed by said depositing said circuit layer over said polymer layer.

30           321. (new) The method of Claim 320, wherein said forming said polymer layer comprises curing.

322. (new) The method of Claim 320, wherein said forming said polymer layer comprises grinding.

5 323. (new) The method of Claim 320, wherein said forming said polymer layer comprises etching.

324. (new) The method of Claim 283 further comprising forming a polymer layer over said circuit layer, followed by said separating said preformed substrate.

10 325. (new) The method of Claim 283 further comprising forming a polymer layer over said preformed substrate and surrounding said preformed die, followed by said depositing said circuit layer having said first portion over said preformed die and said second portion over said polymer layer but not over said preformed die.

15 326. (new) The method of Claim 325, wherein said forming said polymer layer comprises curing.

20 327. (new) The method of Claim 325, wherein said forming said polymer layer comprises grinding.

328. (new) The method of Claim 325, wherein said forming said polymer layer comprises etching.

25 329. (new) The method of Claim 283, wherein said joining said preformed die and said preformed substrate comprises using a conductive paste.

30 330. (new) The method of Claim 283, after said depositing said circuit layer, further comprising depositing a solder bump over said preformed substrate but not over said preformed die, followed by said separating said preformed substrate.

331. (new) The method of Claim 283, after said depositing said circuit layer, further comprising depositing a gold bump over said preformed substrate but not over said preformed die, followed by said separating said preformed substrate.

5           332. (new) The method of Claim 283, wherein said passive device comprises a resistor.

333. (new) The method of Claim 283, wherein said passive device comprises a capacitor.

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334. (new) The method of Claim 283, wherein said passive device comprises an inductor.

335. (new) The method of Claim 284 further comprising forming a polymer layer comprising a first portion over said preformed die and a second portion over said preformed substrate but not over said preformed die, followed by said depositing said waveguide over said polymer layer.

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336. (new) The method of Claim 335, wherein said forming said polymer layer comprises curing.

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337. (new) The method of Claim 335, wherein said forming said polymer layer comprises grinding.

338. (new) The method of Claim 335, wherein said forming said polymer layer comprises etching.

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339. (new) The method of Claim 284 further comprising forming a polymer layer over said waveguide, followed by said separating said preformed substrate.

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340. (new) The method of Claim 284 further comprising forming a polymer layer over said preformed substrate and surrounding said preformed die, followed by



said depositing said waveguide over said polymer layer but not over said preformed die.

5        341. (new) The method of Claim 340, wherein said forming said polymer layer comprises curing.

342. (new) The method of Claim 340, wherein said forming said polymer layer comprises grinding.

10       343. (new) The method of Claim 340, wherein said forming said polymer layer comprises etching.

15       344. (new) The method of Claim 284, wherein said joining said preformed die and said preformed substrate comprises using a conductive paste.

345. (new) The method of Claim 284, after said depositing said waveguide, further comprising depositing a solder bump over said preformed substrate but not over said preformed die, followed by said separating said preformed substrate.

20       346. (new) The method of Claim 284, after said depositing said waveguide, further comprising depositing a gold bump over said preformed substrate but not over said preformed die, followed by said separating said preformed substrate.

25       347. (new) The method of Claim 285 further comprising forming a polymer layer comprising a first portion over said preformed die and a second portion over said preformed substrate but not over said preformed die, followed by said depositing said micro electronic mechanical element over said polymer layer.

30       348. (new) The method of Claim 347, wherein said forming said polymer layer comprises curing.

349. (new) The method of Claim 347, wherein said forming said polymer layer comprises grinding.

5 350. (new) The method of Claim 347, wherein said forming said polymer layer comprises etching.

351. (new) The method of Claim 285 further comprising forming a polymer layer over said micro electronic mechanical element, followed by said separating said preformed substrate.

10 352. (new) The method of Claim 285 further comprising forming a polymer layer over said preformed substrate and surrounding said preformed die, followed by said depositing said micro electronic mechanical element over said polymer layer but not over said preformed die.

15 353. (new) The method of Claim 352, wherein said forming said polymer layer comprises curing.

20 354. (new) The method of Claim 352, wherein said forming said polymer layer comprises grinding.

355. (new) The method of Claim 352, wherein said forming said polymer layer comprises etching.

25 356. (new) The method of Claim 285, wherein said joining said preformed die and said preformed substrate comprises using a conductive paste.

30 357. (new) The method of Claim 285, after said depositing said micro electronic mechanical element, further comprising depositing a solder bump over said preformed substrate but not over said preformed die, followed by said separating said preformed substrate.

358. (new) The method of Claim 285, after said depositing said micro electronic mechanical element, further comprising depositing a gold bump over said preformed substrate but not over said preformed die, followed by said separating said preformed substrate.

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359. (new) The method of Claim 286 further comprising forming a polymer layer comprising a first portion over said preformed die and a second portion over said preformed substrate but not over said preformed die, followed by said depositing said filter over said polymer layer.

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360. (new) The method of Claim 359, wherein said forming said polymer layer comprises curing.

361. (new) The method of Claim 359, wherein said forming said polymer layer comprises grinding.

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362. (new) The method of Claim 359, wherein said forming said polymer layer comprises etching.

363. (new) The method of Claim 286 further comprising forming a polymer layer over said filter, followed by said separating said preformed substrate.

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364. (new) The method of Claim 286 further comprising forming a polymer layer over said preformed substrate and surrounding said preformed die, followed by said depositing said filter over said polymer layer but not over said preformed die.

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365. (new) The method of Claim 364, wherein said forming said polymer layer comprises curing.

366. (new) The method of Claim 364, wherein said forming said polymer layer comprises grinding.

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367. (new) The method of Claim 364, wherein said forming said polymer layer comprises etching.

5 368. (new) The method of Claim 286, wherein said joining said preformed die and said preformed substrate comprises using a conductive paste.

10 369. (new) The method of Claim 286, after said depositing said filter, further comprising depositing a solder bump over said preformed substrate but not over said preformed die, followed by said separating said preformed substrate.

15 370. (new) The method of Claim 286, after said depositing said filter, further comprising depositing a gold bump over said preformed substrate but not over said preformed die, followed by said separating said preformed substrate.